

# CITY OF BEAVERTON

## Engineering Technician 2

### General Summary

Perform a variety of engineering technician functions, including traffic investigation, preparing and maintaining engineering plans and plan designs. Calculate fees and assist in cost analysis. Conduct plan reviews and construction inspection. Assist the public by providing engineering related information.

### Key Distinguishing Duties

Perform journey-level work, including AutoCad drafting, as a technician in the field of civil and environmental engineering technology.

### Essential Functions

*Depending upon assignment, the incumbent may perform a combination of some or all of the following duties, which are a representative sample of the level of work appropriate to this class.*

1. Perform engineering related functions on a computer including computer aided design and drafting (CADD), automated mapping, data entry for Site Development permits, construction inspection records, fee payment processing and engineering and surveying computations.
2. Conduct field surveys, analyze traffic data and apply procedures to determine traffic control measures.
3. Assist in engineering cost analysis. Prepare and review construction estimates. Make on-site visits to confirm or secure data for the completion of drawings. Respond to requests from the public and other agencies in person or over the telephone regarding overall project questions.
4. Conduct plan and performance security reviews for compliance with City, County, State and Federal codes, ordinances, regulations, rules, statutes and laws.
5. Research and evaluate individual properties for flood mapping and elevation.
6. Design and prepare traffic control change and striping plans for public improvement projects on collector and arterial streets.
7. Conduct construction inspections to ensure compliance with standards and specifications and quality workmanship of contractors. Serve as liaison between the Project Manager and contractor.
8. Calculate and collect fees for site development permits and issue right-of-way permits. Review performance securities for construction cost amount.

9. Act as chairperson or instrument operator in a survey crew involved in determining property lines, locations, and preliminary design surveys of existing street and utility locations. Prepare preliminary layouts for future improvement projects and construction stakeout.
10. Manage engineering records, including filing and performing document retrieval or archival, as necessary.
11. Work with the public, other agencies and contractors, including responding to and processing requests for information. Advise on related standards and attend meetings and present information.
12. Perform work of Engineering Technician I as assigned.
13. Participate in division operational processes including procedure development and implementation.
14. Provide excellence in internal and external customer service. Create a positive experience for customers through professional and courteous behavior and creative problem resolution. Focus on producing high quality results.
15. Produce an acceptable quantity and quality of work that is completed within established timelines.
16. Represent the City to the public in operational functions as required. Advance and protect the interests of the City and its citizens in all matters.
17. Develop safe work habits and follow all required safety policies, procedures and techniques. Contribute to the safety of self, co-workers and the general public.
18. Participate in the City Emergency management program including classes, training sessions and emergency events.
19. Follow standards as outlined in the Employee Handbook.
20. Support and respect diversity in the workplace.

### **Other Functions**

1. Perform related duties of a similar scope and nature.

### **Knowledge Required**

- ◆ Working knowledge of practices and principles of civil engineering technology and surveying.
- ◆ Working knowledge of engineering design practices.
- ◆ Basic knowledge of practices and principles of public/business administration practices and decision-making.
- ◆ Working knowledge of public purchasing and contracting laws and regulations.

- ◆ Working knowledge of mathematics principles related to engineering.
- ◆ Working knowledge of English grammar, spelling and usage.

### **Skills/Abilities Required**

- ◆ Strong ability to read engineering maps, plans and specifications.
- ◆ Strong ability to use engineering and architect measuring tools.
- ◆ Strong ability to conduct survey research; interpret and write legal descriptions.
- ◆ Ability to participate on a team focused on producing high quality results.
- ◆ Ability to establish and maintain effective working relationships with employees, contractors, other agencies, public officials and the general public.
- ◆ Strong ability to apply excellent internal and external customer service skills.
- ◆ Strong ability to communicate effectively both orally and in writing with diverse customers, employees, contractors, other agencies, public officials and the general public. Ability to make presentations.
- ◆ Ability to use AutoCad and coordinate geometry design software relating to civil engineering.
- ◆ Ability to use word processing, spreadsheet programs, email and internet browser software.
- ◆ Ability to use general office equipment, measuring devices and small survey tools.

### **Minimum Qualifications Required for Entry**

Associate's degree in civil engineering technology or surveying and 3 years of experience in engineering or a related field or an equivalent combination of education and experience enabling the incumbent to perform the essential functions of the position. One year of production drafting with computer aided design and drafting (CADD) software is desirable.

### **Licensing/Special Requirements**

- ◆ Some positions in this classification are required to possess a valid driver's license and the ability to meet the City's driving standards.

### **Working Conditions**

Regular focus on a computer screen; daily precise control of fingers and hand movements; weekly standing for prolonged periods; occasional lifting between 20 and 50 pounds; occasional crouching, crawling, bending, kneeling, climbing or balancing; occasional exposure to high noise levels; frequent dealing with distraught or difficult individuals; occasional attendance at meetings or activities outside of normal working hours; occasional response to emergency conditions off-hours; occasional operation of a motor vehicle on public roads; occasional exposure to equipment with crushing potential, hazardous chemicals, fumes, vibration and heights; occasional exposure to electrical current.

### **Classification History**

As of 10/97: Engineering Technician II

Revised: 11/07

New class specification title 1/98: Engineering Technician 2

Revised: 11/04

Revised: 1/1/09

Status: SEIU

FLSA: Non-exempt

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Department Head Signature

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Human Resources Signature

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